T88-(RGB) R82

RF LED Controller

User Manual

Please read this brochure carefully before using this controller.

- **Instruction:**

Thanks for choosing T88-(RGB) R82 controller. Before installation, please read this manual carefully to ensure fully understanding in order to avoid unnecessary damage to the controller.

Before using, please check to confirm whether there is any damage caused during the transportation, if there is, don't use this product and notify your supplier.

- **After-sale service:**

Since purchasing, within one year, we guarantee repairing or replacement service with no charge if it is normally used according to the instruction.

If the customer does not follow the instructions and following provisions in this manual, which results in product damage, the supplier is not responsible for any problems arising and defects, even in the warranty period, maintenance costs borne by the customer.

1. Damage caused by misuse, such as not in accordance with the instructions.
2. Damages caused by unauthorized removal, repair, modify of the circuit; incorrect connection and replacement of the chips.
3. Damage caused by transportation, shock, falling after purchase.
4. Damage caused by earthquake, fire, flood, lightning and abnormal voltage.
5. Damage caused by negligence or improper maintenance, such as storage at high temperature and humid environment, vicinity of hazardous chemical substances.
6. Upgrades of products.

- **Safety instruction:**

Making sure you use the product perfectly and safely, please observe the instructions and warning on this manual.

Attention! Operate cautiously and read these instructions carefully.

1. For installation, try to avoid the minefields, strong magnetic field and high-pressure area.
2. Ensure that the wire is connected correctly and firmly in order to avoid short-circuit damage to parts and posing a fire hazard.
3. Please install controller in a well-ventilated place to ensure that the ambient temperature is moderate.
4. Before using this product, please check the DC power and voltage meet the product technical requirements; positive and negative polarity is defined consistent to the product.
5. Prohibit live wiring, check to confirm wiring is correct, if no short-circuit, then power!
6. If any problems do not make unauthorized repairs. Any doubts please contact your local supplier.

This manual applies only to this product of our company, subject to changes without notice.

- **Introduction**

T88-(RGB)R82 Series controller is a smart RGB three colors light controller dedicated to long-illumination LED light, using the most advanced PWM (Pulse Width Modulation) digital control technology, the controller can be operated through RF wireless remote controller. It is available to commercial use and can be installed visibly or invisibly. The installation of LED controller can meet the light requirements of commercial or family lighting at different times and different circumstances, extend the LED life span, and save energy; LED and RGB lights can use this controller to decolorize.

1. Technology specifications

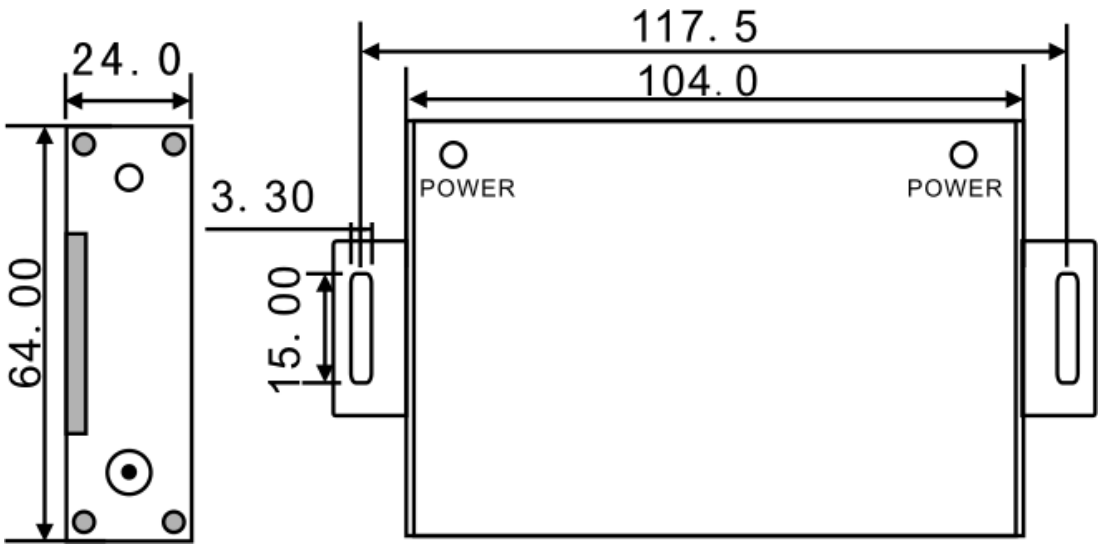
Type	T88-(RGB)R82
Input voltage	DC12V~24V
Output signal	Three-way RGB signal
Max loaded current	12A (3*4A)
Power	144W (12V)/288W(24V)
Dimension	L128.5*W64.5* H24 (mm)
Remote controller	L85*W36.5*16(mm)
Packing dimension	L80*W60*H140(mm)
Gross weight	207g

2. Functions

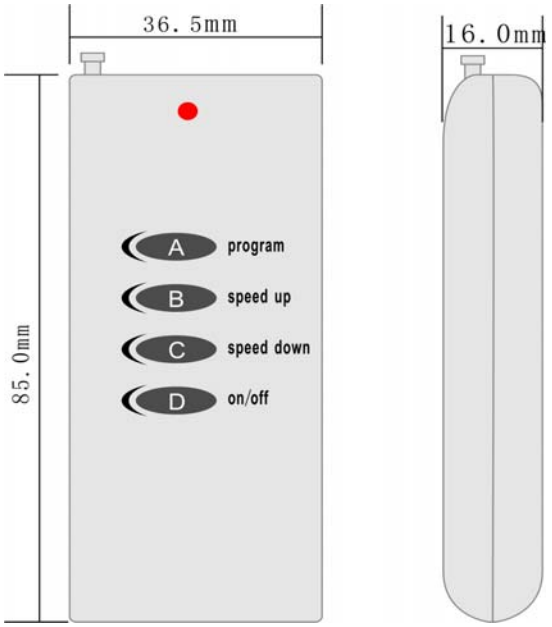
1) RGB full color led strips controllers
2) Control way: RF wireless control, valid in 100M(without barriers)
3) Display mode:7 static, 3 colors jump change;7 colors jump change,3 colors gradual change, 7 colors gradual change.
4) Speed of dynamic mode can be adjusted
5) Power down memory
6) Having functions of both controller and dimmer.
7) Standby function
8) Silver outer shell
9) Three-way RGB signals(common anode/cathode)

3. Structure

(1).View of master controller: (chart 1)

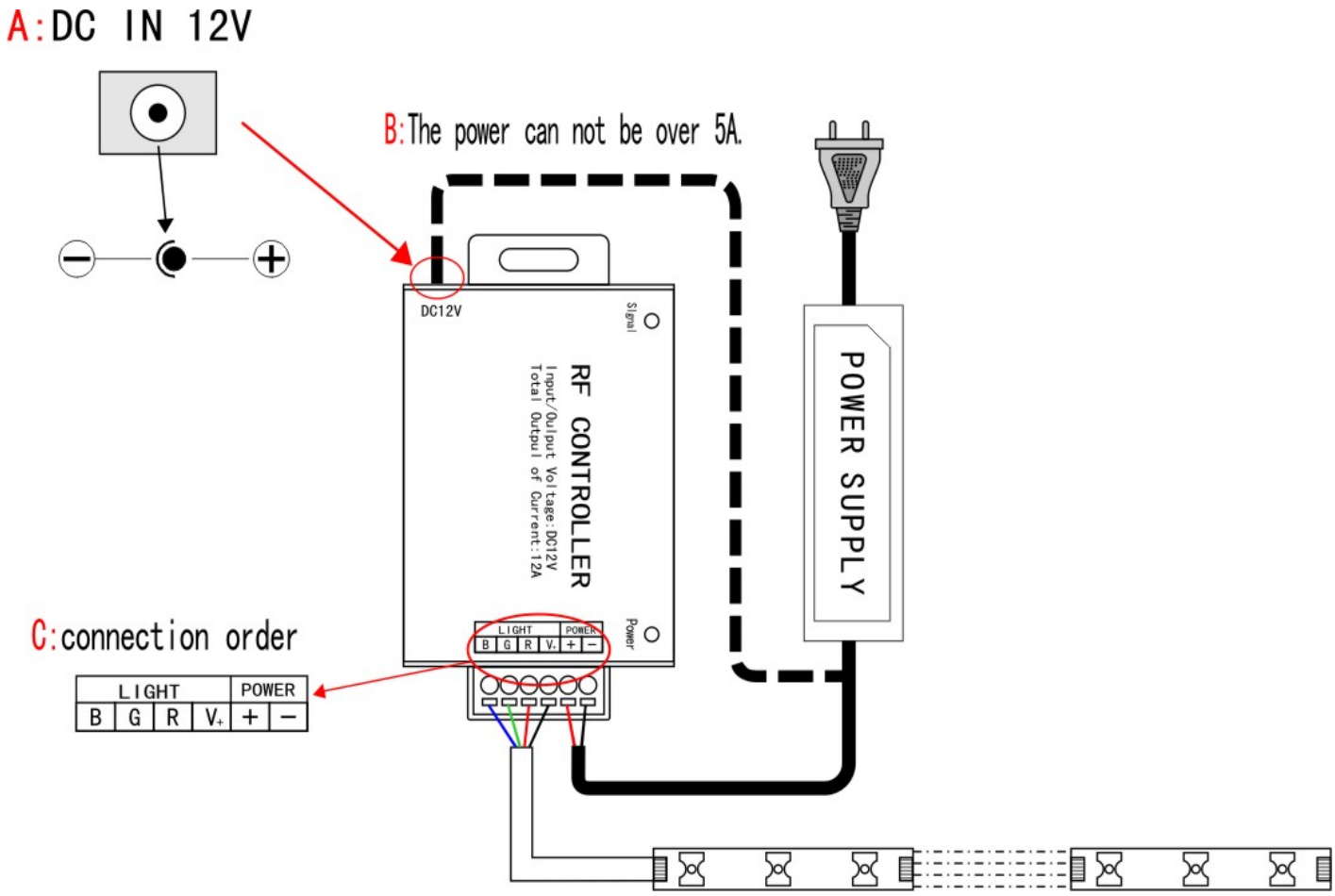


(2).View of remote controller: (chart 2)



4. Connection diagram of controller

(1).Diagram of connection to low power LED: (chart 3）



(2). Descriptions of keys on remote controller panel (table 1)

Symbol	Name	Function
D on/off	on/off	On/off: turn on or off the LED controller
A program	program	Select mode, press the key to change LED mode.
B speed up	speed up	Increase light changing speed, press and hold can increase speed continuously.
C speed do	speed down	Decrease light changing speed, press and hold can decrease speed continuously.

5. Failure analysis and solutions (table 2)

Failures	Analysis	Solutions
No light	1. No power. 2. Reversed polarity connection. 3. Wrong connection or poor contact. 4. LED light has been bad.	1.Check the power 2. Make sure the polarity is right. 3. Re-check wire connection.
Brightness of LED is not consistent	1. Input wire is too long to cause wire loss. 2. Diameter of wire is too thin to cause wire loss. 3. Power overload. 4. Controller overload.	1. Shorten wire or use loop circuit. 2. Calculate the current, and then replace for a thicker wire. 3. Replacement of a larger power. 4. Add a power amplifier.

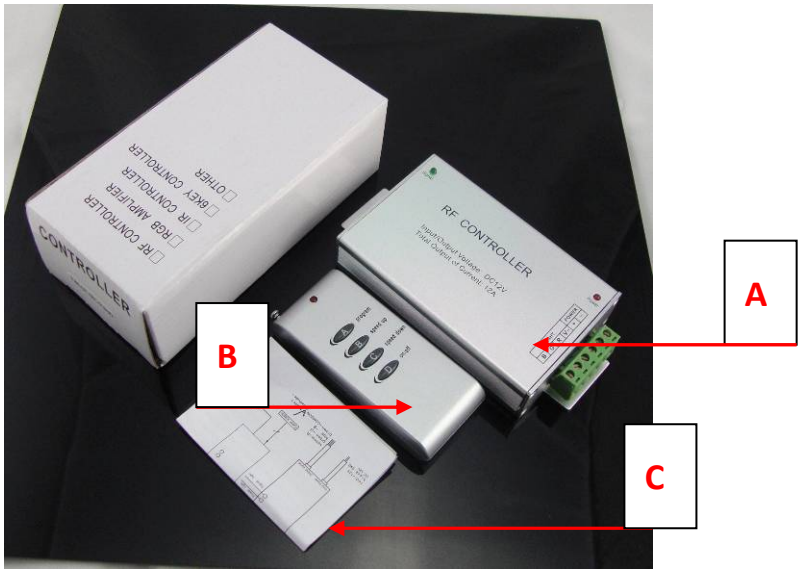
Tips: The effective power is generally only 80% of the marked power, so it is recommended in selecting the power supply, the user choose a slightly larger one than the LED load power, at least for more than 20%.

Appendix: dynamic modes description（table 3）.

Mode	Description
Mode1-7	Static: Red, green, blue, yellow, cyan, purple, white
Mode 8	3 colors jump change: red→green→blue
Mode 9	7 colors jump change: red→green→blue→yellow→cyan→purple→white
Mode 10	3 colors gradual change: red→green→blue
Mode 11	7 colors gradual change: red→green→blue→yellow→cyan→purple→white

6. Packaging

(1).Packaging details (chart 4)



(2).Packaging list (table 4).

Symbol	Name	Picture	External dimension（mm）	QTY	Unit
A	T88A/A(RGB) controller		L128.5*W64.5*H24 (mm)	1	PCS
B	R82 remoter		L85*W36.5*16mm	1	PCS
C	User manual	88ERGB	A6 sheet	1	PCS

(3). Carton packaging (chart 5).

Box packing: 28PCS/carton